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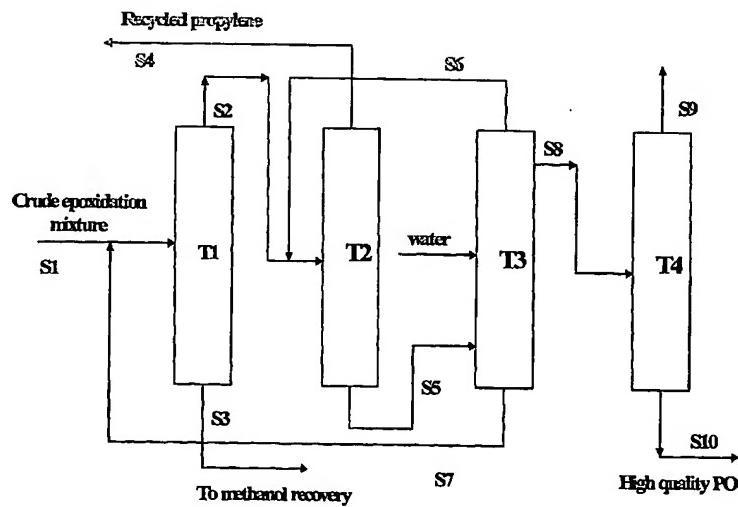
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(54) Title: PURIFICATION OF PROPYLENE OXIDE RESULTING FROM EPOXIDATION OF PROPYLENE WITH HYDROGEN PEROXIDE



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(57) Abstract: A process of separating a purified propylene oxide from a crude epoxidation product produced, preferably, in an epoxidation reaction of propylene with hydrogen peroxide. The process involves removing bulk water, bulk methanol, and unreacted propylene from the crude epoxidation product and thereafter subjecting the resulting propylene oxide product to extractive distillation with water as an extraction solvent. Under distillation conditions, including a bottoms temperature of greater than about 55°C and less than about 75°C, an overhead or side-cut distillate stream containing a purified propylene oxide is obtained with low yield loss of propylene oxide to propylene glycols and other glycol heavies. The purified propylene oxide can be further purified in a finishing distillation to obtain propylene oxide meeting commercial grade purity requirements.



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